

It consists of temporal and spatial cosmology: the temporal cosmology being the division of the existence of a 'world' into four discrete moments (the creation, duration, dissolution, and state of being dissolved; this does not seem to be a canonical division, however). The spatial cosmology consists of a vertical cosmology, the various planes of beings, their bodies, characteristics, food, lifespan, beauty and a horizontal cosmology, the distribution of these world-systems into an "apparently" infinite sheet of "worlds". The existence of world-periods (moments, kalpas), is well attested to by the Buddha.<sup>[1][2]</sup>



The historical Buddha (Gautama Buddha) made references to the existence of aeons (the duration of which he describes using a metaphor of the time taken to erode a huge rock measuring 1x1x1 mile by brushing it with a silk cloth, once every century),<sup>[3]</sup> and simultaneously intimates his knowledge of past events, such as the dawn of human beings in their coarse and gender-split forms,<sup>[4]</sup> his ability to convey his voice vast distances,<sup>[5]</sup> as well as the ability of his disciples (who if they fare accordingly) to be reborn in any one of these planes (should they so choose).<sup>[6]</sup>

# Contents

## Causes of Rebirth in various planes

## Vertical cosmology

## Formless Realm (Ārūpyadhātu आरूपधातु)

Arupa Bhumi (Arupachara Brahmalokas or Immaterial/Formless Brahma Realms)

## Form Realm (Rūpadhātu)

## Pure Abodes

## Brhatphala worlds बृहत्फल

## Śubhakrtsna worlds

## Ābhāsvara worlds

## Brahmā worlds

Desire Realm (Kāmadhātu कामधातु)

Heavens

### Higher Heavens (Higher Kama Loka)

Lower Heavens (Worlds of Sumeru)

Earthly realms

Hells (Narakas)

Cold Narakas

Hot Narakas

The foundations of the earth

Sahasra cosmology

### **Temporal cosmology**

Maha Kalpa

Vivartakalpa

Vivartasthāyikalpa

First antarakalpa

Second antarakalpa

*Samvartakalpa*

*Samvartasthāyikalpa*

Other destructions

### **See also**

### **References**

### **Further reading**

## **Introduction**

The self-consistent Buddhist cosmology, which is presented in commentaries and works of Abhidharma in both Theravāda and Mahāyāna traditions, is the end-product of an analysis and reconciliation of cosmological comments found in the Buddhist sūtra and vinaya traditions. No single sūtra sets out the entire structure of the universe, but in several sūtras the Buddha describes other worlds and states of being, and other sūtras describe the origin and destruction of the universe. The order of the planes are found in various discourses of Gautama Buddha in the Sutta Pitaka. For example, in the Saleyyaka Sutta of the Majjhima Nikaya the Buddha mentioned the planes above the human plane in ascending order. In several suttas in the Anguttara Nikaya, the Buddha described the causes of rebirth in these planes in the same order. The synthesis of these data into a single comprehensive system must have taken place early in the history of Buddhism, as the system described in the Pāli Vibhajjavāda tradition (represented by today's Theravādins) agrees, despite some minor inconsistencies of nomenclature, with the Sarvāstivāda tradition which is preserved by Mahāyāna Buddhists.<sup>[7]</sup>

The picture of the world presented in Buddhist cosmological descriptions cannot be taken as a literal description of the shape of the universe. It is inconsistent, and cannot be made consistent, with astronomical data that were already known in ancient India. However, it is not intended to be a description of how ordinary humans perceive their world;<sup>[7]</sup> rather, it is the universe as seen through the divyacakṣus दिव्यचक्षुः (Pāli: dibbacakkhu दिब्बचक्षु), the "divine eye" by which a Buddha or an arhat who has cultivated this faculty can perceive all of the other worlds and the beings arising (being born) and passing away (dying) within them, and can tell from what state they have been reborn and into what state they will be reborn. The cosmology has also been interpreted in a symbolical or allegorical sense (for Mahayana teaching see Ten spiritual realms).

Some of the many suttas in Pali Canon , where some description about the cosmology can be found are Saleyyaka Sutta, Maha-Saccaka Sutta, Māpuññabhāyi Sutta, Itivuttakas, Jhana Sutta, Kevaddha Sutta, Dana Sutta, Maha-samya Sutta, Cula-kammavibhanga Sutta, Janussonin Sutta, The Vipaka Sutta, Rattana

Sutta, Tirokudda Kanda, Balapandita Sutta and the Devaduta Sutta. A cosmology with some difference is further explained in Chapter 5 of the Avatamsaka Sutra.

## Causes of Rebirth in various planes

The process by which sentient beings migrate from one state of existence to another is dependent on causes and conditions. The three causes are giving or charity, moral conduct, meditative development, and their opposites. Rebirth in the Kama-loka depends on a person's moral conduct and practice of giving. Rebirth in the Rupa-loka and Arupa-loka also requires meditation development. Liberation from all rebirth requires wisdom in addition to moral conduct and meditation.

Buddhist cosmology can be divided into two related kinds: spatial cosmology, which describes the arrangement of the various worlds within the universe; and temporal cosmology, which describes how those worlds come into existence, and how they pass away.

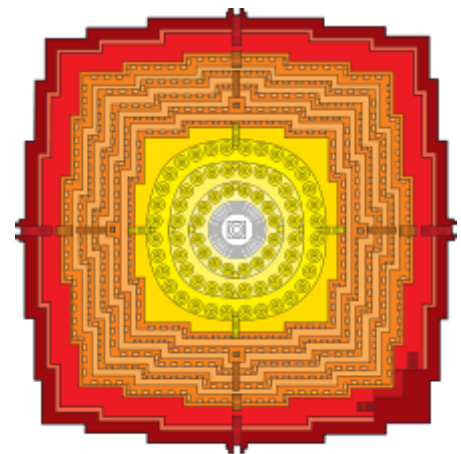
## Spacial Cosmology

Spatial cosmology displays the various, multitude of worlds embedded in the universe. Spatial cosmology can also be divided into two branches. The *vertical* (or *cakravāḍa*; *Devanagari*: चक्रवाड) cosmology describes the arrangement of worlds in a vertical pattern, some being higher and some lower. By contrast, the *horizontal* (sahasra) cosmology describes the grouping of these vertical worlds into sets of thousands, millions or billions.

## Vertical cosmology

"In the vertical cosmology, the universe exists of many worlds (*lokāḥ*; *Devanagari*: लोकाः) – one might say "planes/realms" – stacked one upon the next in layers. Each world corresponds to a mental state or a state of being".<sup>[8]</sup> A world is not, however, a location so much as it is the beings which compose it; it is sustained by their karma and if the beings in a world all die or disappear, the world disappears too. Likewise, a world comes into existence when the first being is born into it. The physical separation is not so important as the difference in mental state; humans and animals, though they partially share the same physical environments, still belong to different worlds because their minds perceive and react to those environments differently.

The vertical cosmology is divided into thirty-one planes of existence and the planes into three realms, or **dhātus**, each corresponding to a different type of mentality. These three realms (Tridhātu) are the *Ārūpyadhātu* (4 Realms), the *Rūpadhātu* (16 Realms), and the *Kāmadhātu* (15 Realms). In some instances all of the beings born in the *Ārūpyadhātu* and the *Rūpadhātu* are informally classified as "gods" or "deities" (*devāḥ*), along with the gods of the *Kāmadhātu*, notwithstanding the fact that the deities of the *Kāmadhātu* differ more from those of the *Ārūpyadhātu* than they do from humans. It is to be understood that **deva** is an imprecise term referring to any being living in a longer-lived and generally more blissful state than humans. Most of them



■ Kāmadhātu ■ Rūpadhātu ■ Ārūpadhātu

The plan of the Borobudur temple complex in Java mirrors the three main levels of Buddhist cosmology. The highest point in the center symbolizes Buddhahood.



Aerial view of Borobudur

The term "brahmā; Devanagari: ब्रह्मा" is used both as a name and as a generic term for one of the higher devas. In its broadest sense, it can refer to any of the inhabitants of the Ārūpyadhātu and the Rūpadhātu. In more restricted senses, it can refer to an inhabitant of one of the eleven lower worlds of the Rūpadhātu, or in its narrowest sense, to the three lowest worlds of the Rūpadhātu (Plane of Brahma's retinue) A large number of devas use the name "Brahmā", e.g. Brahmā Sahampati ब्रह्मा सहम्पत्ति, Brahmā Sanatkumāra ब्रह्मा सनत्कुमारः, Baka Brahmā बकब्रह्मा, etc. It is not always clear which world they belong to, although it must always be one of the worlds of the Rūpadhātu. According to the Ayacana Sutta, Brahmā Sahampati, who begs the Buddha to teach Dhamma to the world, resides in the Śuddhāvāsa worlds.

- **Naivasamjñānāsamjñāyatana** नैवसंज्ञानासंज्ञायतन or **Nevasaññānāsaññāyatana** नेवसज्ज्ञानासज्ज्ञायतन (Tib: 'du shes med 'du shes med min; Chinese: 非有想非无想处; Jpn: 非有想非無想处; Burmese: **နေဝသညာ နာသညာယတန**; Thai: เภวสณฺญานาสณฺญายตฺน or ไบวสัณฺญา นาสัณฺญายตฺน ) "Sphere of neither perception nor non-perception". Rebirth in this plane is a result of attaining the fourth formless *jhana* in a previous life. In this sphere the Formless Devas have gone beyond a mere negation of perception and have attained a liminal state where they do not engage in "perception" (*samjñā*, recognition of particulars by their marks) but are not wholly unconscious. This was the sphere reached by Udraka Rāmaputra (Pāli: Uddaka Rāmaputta), the second of the Buddha's original teachers, who considered it equivalent to enlightenment. Total life span on this realm in human years - 84,000 Maha Kalpa (Maha Kalpa = 4 Asankya Kalpa). This realm is placed 5,580,000 Yojanas ( 1 Yojana = 16 Miles) above the Plane of Nothingness (Ākimcanyāyatana).

- **Ākiṃcanyāyatana** आकिञ्चन्यायतना or **Ākiñcaññāyatana** आकिञ्चञ्जायतन (Tib: *ci yang med*; Chinese: 无所有处/無所有處; Jpn: 無所有処 *mu sho u sho*; Burmese: အကိဉ္စညာယတန ; Thai: อากิณฺณวณฺณายตฺต or อากิณฺณายตฺต; Devanagari: /) "Sphere of Nothingness" (literally "lacking anything"). Rebirth in this plane is a result of attaining the third formless *jhana* in a previous life. In this sphere Formless Devas dwell contemplating upon the thought that "there is no thing". This is considered a form of perception, though a very subtle one. This was the sphere reached by *Ārāḍa Kālāma* (Pāli: *Ālāra Kālāma*), the first of the Buddha's original teachers; he considered it to be equivalent to enlightenment. Total life span on this realm in human years – 60,000 Maha Kalpa. This realm is placed 5,580,000 yojanas above the Plane of Infinite Consciousness(Vijñānānantyāyatana).
- **Vijñānānantyāyatana** विज्ञानानन्त्यायतन or **Viññāṇaṇcāyatana** विज्जाणानञ्चायतन or more commonly the contracted form **Viññāṇaṇcāyatana** (Tib: *nam shes mtha' yas*; Chinese: 识无边处/識無邊處; Jpn: 識無辺処 *shiki mu hen jo*; Burmese: ဝိညာဏဉာယတန ; Thai: วิญญานาวณฺณายตฺต or วิญญານานนฺตยาယตฺต) "Sphere of Infinite Consciousness". Rebirth in this plane is a result of attaining the second formless *jhana*. In this sphere Formless Devas dwell meditating on their consciousness (*vijñāna*) as infinitely pervasive. Total life span on this realm in human years – 40,000 Maha Kalpa. This realm is placed 5,580,000 yojanas above the Plane of Infinite Space (Ākāśānantyāyatana)
- **Ākāśānantyāyatana** आकाशानन्त्यायतन or **Ākāśāṇcāyatana** आकासानञ्चायतन (Tib: *nam mkha' mtha' yas*; Chinese: 空无边处/空無邊處; Jpn: 空無辺処 *kū mu hen jo*; Burmese: အကာသနဉာယတန; Thai: อากาสาณวณฺณายตฺต or อากาसानนฺตยาယตฺต) "Sphere of Infinite Space". Rebirth in this plane is a result of attaining the first formless *jhana*. In this sphere Formless Devas dwell meditating upon space or extension (*ākāśa*) as infinitely pervasive. Total life span on this realm in human years – 20,000 Maha Kalpa. This realm is placed 5,580,000 yojanas above the Akanittha Brahma Loka – Highest plane of pure abodes.

## Form Realm (Rūpadhātu)

The Rūpadhātu रूपधातु: (Pāli: Rūpaloka रूपलोक; Tib: *gzugs kyi khams*; Chinese: 色界; Jpn: 色界 *Shiki-kai*; Burmese: ရူပဗြဟ္မာဘုံ; Thai: รูปโลก / รูปธาตุ) or "Form realm" is, as the name implies, the first of the physical realms; its inhabitants all have a location and bodies of a sort, though those bodies are composed of a subtle substance which is of itself invisible to the inhabitants of the Kāmadhātu. According to the Janavasabha Sutta, when a brahma (a being from the Brahma-world of the Rūpadhātu) wishes to visit a deva of the *Trāyastriṃśa* heaven (in the Kāmadhātu), he has to assume a "grosser form" in order to be visible to them. There are 16–22 Rūpadhātu in Buddhism texts, the most common saying is 18.<sup>[9]</sup>

The beings of the Form realm are not subject to the extremes of pleasure and pain, or governed by desires for things pleasing to the senses, as the beings of the Kāmadhātu are. The bodies of Form realm beings do not have sexual distinctions.

Like the beings of the Ārūpyadhātu, the dwellers in the Rūpadhātu have minds corresponding to the *dhyānas* (Pāli: *jhānas*). In their case it is the four lower *dhyānas* or *rūpadhyānas* (रूपध्यान). However, although the beings of the Rūpadhātu can be divided into four broad grades corresponding to these four *dhyānas*, each of them is subdivided into further grades, three for each of the four *dhyānas* and five for the *Suddhāvāsa* devas, for a total of seventeen grades (the Theravāda tradition counts one less grade in the highest *dhyāna* for a total of sixteen).

Physically, the Rūpadhātu consists of a series of planes stacked on top of each other, each one in a series of steps half the size of the previous one as one descends. In part, this reflects the fact that the devas are also thought of as physically larger on the higher planes. The highest planes are also broader in extent than the ones lower down, as discussed in the section on *Sahasra cosmology*. The height of these planes is expressed in *yojanas*, a measurement of very uncertain length, but sometimes taken to be about 4,000 times the height of a man, and so approximately 4.54 miles (7.31 km).

## Pure Abodes

The Śuddhāvāsa शुद्धावास (Pāli: Suddhāvāsa सुद्धावास; Tib: *gnas gtsang ma*; Chinese: 净居天/淨居天; Thai: สุทฺธาวาส) worlds, or "Pure Abodes", are distinct from the other worlds of the Rūpadhātu in that they do not house beings who have been born there through ordinary merit or meditative attainments, but only those *Anāgāmins* ("Non-returners"), the third level on the path of enlightenment, who are already on the path to *Arhat*-hood and who will attain enlightenment directly from the Śuddhāvāsa worlds without being reborn in a lower plane. These Pure Abodes are accessible only to those who have destroyed the lower five fetters, consisting of self-view, sceptical doubt, clinging to rites and ceremonies, sense desires, and ill-will. They will destroy their remaining fetters of craving for fine material existence, craving for immaterial existence, conceit, restlessness and ignorance during their existence in the Pure Abodes. Those who take rebirth here are called "non-returners" because they do not return from that world, but attain final *nibbana* there without coming back. Every Śuddhāvāsa deva is therefore a protector of Buddhism. They guard and protect Buddhism on earth, and will pass into enlightenment as *Arhats* when they pass away from the *Suddhāvāsa* worlds. *Brahma Sahampati*, a inhabitant from these worlds, who appealed to the newly enlightened Buddha to teach, was an Anagami under the previous Buddha.<sup>[10]</sup> Because a Śuddhāvāsa deva will never be reborn outside the Śuddhāvāsa worlds, no *Bodhisattva* is ever born in these worlds, as a *Bodhisattva* must ultimately be reborn as a human being.

Since these devas rise from lower planes only due to the teaching of a Buddha, they can remain empty for very long periods if no Buddha arises. However, unlike the lower worlds, the Śuddhāvāsa worlds are never destroyed by natural catastrophe. The Śuddhāvāsa devas predict the coming of a Buddha and, taking the guise of Brahmins, reveal to human beings the signs by which a Buddha can be recognized. They also ensure that a Bodhisattva in his last life will see the four signs that will lead to his renunciation.

The five Śuddhāvāsa worlds are:

- ***Akaniṣṭha*** अकनिष्ठ or ***Akaniṭṭha*** अकनिट्ठ (Chinese: 色究竟天; Thai: อกนิฏฐา or อกนิษฐา)– World of devas "equal in rank" (literally: having no one as the youngest). The highest of all the Rūpadhātu worlds, it is often used to refer to the highest extreme of the universe. The current Śakra will eventually be born there. The duration of life in *Akaniṣṭha* is 16,000 kalpas (Vibhāgyavāda tradition). *Maheśvara*, the ruler of the three realms of *samsara* is said to dwell here.<sup>[11]</sup> The height of this world is 167,772,160 *yojanas* above the Earth.<sup>[12]</sup>
- ***Sudarśana*** सुदर्शन or ***Sudassī*** सुदस्सी (Chinese: 善现天; Thai: สุทัสสะ or สุตาสะ)– The "clear-seeing" devas live in a world similar to and friendly with the *Akaniṣṭha* world. The height of this world is 83,886,080 *yojanas* above the Earth.
- ***Sudṛśa*** सुदृश or ***Sudassa*** सुदस्स (Chinese: 善见天; Thai: สุทัสสา or สุนสสา)– The world of the "beautiful" devas are said to be the place of rebirth for five kinds of *anāgāmins*. The height of this world is 41,943,040 *yojanas* above the Earth.
- ***Atapa*** अतप or ***Atappa*** अतप्प (Chinese: 无热天; Thai: อตปပါ or อตปา) – The world of the "untroubled" devas, whose company those of lower realms wish for. The height of this world is 20,971,520 *yojanas* above the Earth.

- **Avṛha** अवृह or **Aviha** अविह (Chinese: 无烦天; Thai: วัณหา or วัณสะหา) – The world of the "not falling" devas, perhaps the most common destination for reborn Anāgāmins. Many achieve arhatship directly in this world, but some pass away and are reborn in sequentially higher worlds of the Pure Abodes until they are at last reborn in the *Akaniṣṭha* world. These are called in Pāli *uddhaṃsotas*, "those whose stream goes upward". The duration of life in *Avṛha* is 1,000 kalpas (Vibhajyavāda tradition). The height of this world is 10,485,760 yojanas above the Earth.

## Bṛhatphala worlds बृहत्फल

The mental state of the devas of the *Bṛhatphala* worlds (Chn: 四禅九天/四禪九天; Jpn: 四禅九天; Thai: ฌ๔๗๑๗๑) corresponds to the fourth dhyāna, and is characterized by equanimity (*upekṣā*). The *Bṛhatphala* worlds form the upper limit to the destruction of the universe by wind at the end of a mahākālpa (see Temporal cosmology below), that is, they are spared such destruction.

- **Asaññasatta** असञ्जसत्त (Sanskrit: *Asaṃjñasattva* असंज्ञसत्त्व; Chinese: 无想天; Thai: อกัณฺณสัจฺจ) (Vibhajyavāda tradition only) – "Unconscious beings", who have only bodies without consciousness are the devas who have attained a high dhyāna (similar to that of the Formless Realm), and, wishing to avoid the perils of perception, have achieved a state of non-perception in which they endure for a time. Rebirth into this plane results from a meditative practice aimed at the suppression of consciousness. Those who take up this practice assume release from suffering can be achieved by attaining unconsciousness. However, when the life span in this realm ends, perception arises again, the beings pass away and are born in other planes where consciousness returns.
- **Bṛhatphala** बृहत्फल or **Vehapphala** वेहप्फल (Chinese: 广果天; Tib: 'bras bu che; Thai: ฌ๕๗๑๗๑) – Devas "having great fruit". Their lifespan is 500 mahākālpas. (Vibhajyavāda tradition). Some *Anāgāmins* are reborn here. The height of this world is 5,242,880 yojanas above the Earth. In the Jhāna Sutta of the Anguttara Nikaya the Buddha said "The Vehapphala devas, monks, have a life-span of 500 eons. A run-of-the-mill person having stayed there, having used up all the life-span of those devas, goes to hell, to the animal womb, to the state of the hungry shades."
- **Puṇyaprasava** पुण्यप्रसव (Sarvāstivāda tradition only; Chinese: 福生天; Tib: *bsod nams* skyes; Thai: ฌ๖๗๑๗๑) – The world of the devas who are the "offspring of merit". The height of this world is 2,621,440 yojanas above the Earth.
- **Anabhraka** अनभ्रक (Sarvāstivāda tradition only; Chinese: 无云天; Tib: *sprin med*; Thai: ฌ๗๑๗๑) – The world of the "cloudless" devas. The height of this world is 1,310,720 yojanas above the Earth.

## Śubhakṛtsna worlds शुभकृत्सना

The mental state of the devas of the *Śubhakṛtsna* worlds (Chn/Jpn: 三禅三天; Devanagari: शुभकृत्सन्; Thai: ฌ๓๓๑๗๑) corresponds to the third dhyāna, and is characterized by a quiet joy (*sukha*). These devas have bodies that radiate a steady light. The *Śubhakṛtsna* worlds form the upper limit to the destruction of the universe by water at the end of a mahākālpa (see Temporal cosmology below), that is, the flood of water does not rise high enough to reach them.

- **Śubhakṛtsna** शुभकृत्सन् or **Subhakiṇṇa** / **Subhakiṇha** सुभकिण्ण/सुभकिण्ह (Chinese: 遍净天; Tib: *dge rgyas*; Thai: ฌ๓๓๑๗๑ or ฌ๓๓๑๗๑) – The world of devas of "total beauty". Their

lifespan is 64 mahākālpas (some sources: 4 mahākālpas) according to the Vibhajyavāda tradition. 64 mahākālpas is the interval between destructions of the universe by wind, including the *Śubhakarīśna* worlds. The height of this world is 655,360 yojanas above the Earth. The Buddha said, "A run-of-the-mill person having stayed there, having used up all the life-span of those devas, goes to hell, to the animal womb, to the state of the hungry shades."

- ***Apramāṇasubha*** अप्रमाणशुभ or ***Appamāṇasubha*** अप्पमाणसुभ (Chinese: 无量净天; Tib: *tshad med dge*; Thai: อัปปมาณสุภา or อัปฺรมาณสุภา) – The world of devas of "limitless beauty". Their lifespan is 32 mahākālpas (Vibhajyavāda tradition). They possess "faith, virtue, learning, munificence and wisdom". The height of this world is 327,680 yojanas above the Earth.
- ***Parittaśubha*** परित्तशुभ or ***Parittasubha*** परित्तसुभ (Chinese: 少净天; Tib: *dge chung*; Thai: ปรีตฺตสุภา or ปรีตฺตตสุภา) – The world of devas of "limited beauty". Their lifespan is 16 mahākālpas. The height of this world is 163,840 yojanas above the Earth.

## Ābhāsvara worlds

The mental state of the devas of the *Ābhāsvara* आभास्वर worlds (Chn/Jpn: 二禅三天; Thai: อาภัสสราภุ/อาภาสวรารต) corresponds to the second dhyāna, and is characterized by delight (*prīti*) as well as joy (*sukha*); the *Ābhāsvara* devas are said to shout aloud in their joy, crying *aho sukham!* ("Oh joy!"). These devas have bodies that emit flashing rays of light like lightning. They are said to have similar bodies (to each other) but diverse perceptions.

The *Ābhāsvara* worlds form the upper limit to the destruction of the universe by fire at the end of a mahākālpa (see *Temporal cosmology* below), that is, the column of fire does not rise high enough to reach them. After the destruction of the world, at the beginning of the vivartakālpa, the worlds are first populated by beings reborn from the *Ābhāsvara* worlds.

- ***Ābhāsvara*** आभास्वर or ***Ābhassara*** आभस्सर (Chinese: 光音天; Tib: 'od gsal; Thai: อาภัสสรา or อาภาสวร) – The world of devas "possessing splendor". The lifespan of the *Ābhāsvara* devas is 8 mahākālpas (others: 2 mahākālpas). Eight mahākālpas is the interval between destructions of the universe by water, which includes the *Ābhāsvara* worlds. The height of this world is 81,920 yojanas above the Earth.
- ***Apramāṇābha*** अप्रमाणभ or ***Appamāṇābha*** अप्पमाणभ (Chinese: 无量光天; Tib: *tshad med 'od*; Thai: อัปปมาณภ or อัปฺรมาณภ) – The world of devas of "limitless light", a concept on which they meditate. Their lifespan is 4 mahākālpas. The height of this world is 40,960 yojanas above the Earth.
- ***Parittābha*** परित्तभ or ***Parittābha*** परित्तभ (Chinese: 少光天; Tib: 'od chung; Thai: ปรีตฺตภ or ปรีตฺตตภ) – The world of devas of "limited light". Their lifespan is 2 mahākālpas. The height of this world is 20,480 yojanas above the Earth.

## Brahmā worlds

The mental state of the devas of the Brahmā worlds (Chn/Jpn: 初禅三天; Thai: พรหมภุ) corresponds to the first dhyāna, and is characterized by observation (*vitarka*) and reflection (*vicāra*) as well as delight (*prīti*) and joy (*sukha*). The Brahmā worlds, together with the other lower worlds of the universe, are destroyed by fire at the end of a mahākālpa (see *Temporal cosmology* below). One way to rebirth in the brahma



world is mastery over the first jhana. Another is through meditations on loving kindness, compassion, altruistic joy, and equanimity. The Buddha teaches the Brahmin Subha, how to be born in the world of Brahma, in the Subha Sutta, when asked by him.

- **Mahābrahmā** महाब्रह्मा (Tib: *tshangs pa chen po*; Chn/Jpn: 大梵天 *Daibonten*; Thai: มหาพรหม) – the world of "Great Brahmā", believed by many to be the creator of the world, and having as his titles "Brahmā, Great Brahmā, the Conqueror, the Unconquered, the All-Seeing, All-Powerful, the Lord, the Maker and Creator, the Ruler, Appointer and Orderer, Father of All That Have Been and Shall Be." According to the Brahmajāla Sutta (DN.1), a Mahābrahmā is a being from the Ābhāsvara worlds who falls into a lower world through exhaustion of his merits and is reborn alone in the Brahma-world; forgetting his former existence, he imagines himself to have come into existence without cause. Note that even such a high-ranking deity has no intrinsic knowledge of the worlds above his own. Mahābrahmā is  $1\frac{1}{2}$  yojanas tall. His lifespan variously said to be 1 kalpa (Vibhajyavāda tradition) or  $1\frac{1}{2}$  kalpas long (Sarvāstivāda tradition), although it would seem that it could be no longer than  $\frac{3}{4}$  of a mahākalpa, i.e., all of the mahākalpa except for the *Samvartasthāyikalpa*, because that is the total length of time between the rebuilding of the lower world and its destruction. It is unclear what period of time "kalpa" refers to in this case. The height of this world is 10,240 yojanas above the Earth.
- **Brahmapurohita** ब्रह्मपुरोहित (Chinese: 梵辅天; Tib: *tshangs 'khor*; Thai: พรหมบุโรहित) – the "Ministers of Brahmā" are beings, also originally from the Ābhāsvara worlds, that are born as companions to Mahābrahmā after he has spent some time alone. Since they arise subsequent to his thought of a desire for companions, he believes himself to be their creator, and they likewise believe him to be their creator and lord. They are 1 yojana in height and their lifespan is variously said to be  $\frac{1}{2}$  of a kalpa (Vibhajyavāda tradition) or a whole kalpa (Sarvāstivāda tradition). If they are later reborn in a lower world, and come to recall some part of their last existence, they teach the doctrine of Brahmā as creator as a revealed truth. The height of this world is 5,120 yojanas above the Earth.
- **Brahmapāriśadya** ब्रह्मपरिषद्य or **Brahmapārisajja** ब्रह्मपरिसज्ज (Chinese: 梵众天; Tib: *tshangs ris*; Thai: พรหมปริสัชชา or พรหมปาริสัจจา) – the "Councilors of Brahmā" or the devas "belonging to the assembly of Brahmā". They are also called **Brahmakāyika**, but this name can be used for any of the inhabitants of the Brahma-worlds. They are half a yojana in height and their lifespan is variously said to be  $\frac{1}{3}$  of a kalpa (Vibhajyavāda tradition) or  $\frac{1}{2}$  of a kalpa (Sarvāstivāda tradition). The height of this world is 2,560 yojanas above the Earth.

## Desire Realm (Kāmadhātu कामधातु)

The beings born in the Kāmadhātu कामधातु (Pāli: Kāmaloka कामलोक; Tib: *'dod pa'i khams*; Chn/Jpn: 欲界 *Yoku-kai*; Thai: กามภุมิ) differ in degree of happiness, but they are all, other than Anagamis, Arhats and Buddhas, under the domination of Māra and are bound by sensual desire, which causes them suffering. Birth into these planes takes place as a result of our Karma. The Sense-Sphere (Desire) Realm is the lowest of the three realms. The driving force within this realm is sensual desire.

## Heavens

The following four worlds are bounded planes, each 80,000 yojanas square, which float in the air above the top of Mount Sumeru. Although all of the worlds inhabited by devas (that is, all the worlds down to the Cāturmahārājikakāyika world and sometimes including the Asuras) are sometimes called "heavens". These devas enjoy aesthetic pleasures, long life, beauty, and certain powers. Anyone who has led a wholesome life can be born in them.

## Higher Heavens (Higher Kama Loka)

These devas live in four heavens that float in the air, leaving them free from contact with the strife of the lower world. In the western sense of the word "heaven", the term best applies to the four worlds listed below:

- **Parinirmīta-vaśavartin** परिनिर्मितवशवर्ती or **Paranimmita-vasavatti** परनिमित्तवसवत्ति (Tib: *gzhan 'phrul dbang byed*; Chn/Jpn: 他化自在天 *Takejizai-ten*; Burmese: ပရနိမ္မိတဝသဝတ္တိ ; Thai: ปณิณมิตตวสวัตฺติ or ปณิณมิตตวสวตฺติ) – The heaven of devas "with power over (others)" creations". These devas do not create pleasing forms that they desire for themselves, but their desires are fulfilled by the acts of other devas who wish for their favor. The ruler of this world is called Vaśavartin (Pāli: Vasavatti), who has longer life, greater beauty, more power and happiness and more delightful sense-objects than the other devas of his world. This world is also the home of the devaputra (being of divine race) called Māra, who endeavors to keep all beings of the Kāmadhātu in the grip of sensual pleasures. Māra is also sometimes called Vaśavartin, but in general these two dwellers of this world are kept distinct. The beings of this world are 4,500 feet (1,400 m) tall and live for 9,216,000,000 years (Sarvāstivāda tradition). The height of this world is 1,280 yojanas above the Earth.
- **Nirmāṇarati** निर्माणरति or **Nimmānaratī** निम्माणरती (Tib: **phrul dga**; Chn: 化乐天/化樂天; Jpn: 化樂天 *Keraku-ten*; Burmese: နိမ္မာနရတိ; Thai: นิมมานุสฺส or นิมนานุสฺส) – The world of devas "delighting in their creations". The devas of this world are capable of making any appearance to please themselves. The lord of this world is called Sunirmīta (Pāli: Sunimmita); his wife is the rebirth of Visākhā, formerly the chief of the upāsikās (female lay devotees) of the Buddha. The beings of this world are 3,750 feet (1,140 m) tall and live for 2,304,000,000 years (Sarvāstivāda tradition). The height of this world is 640 yojanas above the Earth.
- **Tuṣita** तुषित or **Tusita** तुसित (Tib: *dga' ldan*; Chn/Jpn: 兜率天 *Tosotsu-ten*; Burmese: တုသိတာ; Thai: ตุสฺสิต, ตุสฺสิตา or ตุสฺสิตา) – The world of the "joyful" devas. This world is best known for being the world in which a Bodhisattva lives before being reborn in the world of humans. Until a few thousand years ago, the Bodhisattva of this world was Śvetaketu (Pāli: Setaketu), who was reborn as Siddhārtha, who would become the Buddha Śākyamuni; since then the Bodhisattva has been Nātha (or Nāthadeva) who will be reborn as Ajita and will become the Buddha Maitreya (Pāli Metteyya). While this Bodhisattva is the foremost of the dwellers in *Tuṣita*, the ruler of this world is another deva called *Santuṣita* (Pāli: Santusita). The beings of this world are 3,000 feet (910 m) tall and live for 576,000,000 years (Sarvāstivāda tradition). The height of this world is 320 yojanas above the Earth.
- **Yāma** याम (Tib: *'thab bral*; Chn/Jpn: 夜摩天 *Yama-ten*; Burmese: ယမာ; Thai: ยามา) – Sometimes called the "heaven without fighting", because it is the lowest of the heavens to be physically separated from the tumults of the earthly world. These devas live in the air, free of all difficulties. Its ruler is the deva Suyāma; according to some, his wife is the rebirth of Sirimā, a courtesan of Rājagṛha in the Buddha's time who was generous to the monks. The beings of this world are 2,250 feet (690 m) tall and live for 144,000,000 years (Sarvāstivāda tradition). The height of this world is 160 yojanas above the Earth.

## Lower Heavens (Worlds of Sumeru)

The world-mountain of Sumeru सुमेरु (Sineru सिनेरु; Thai: เขาพระสุเมรุ, เขาสุมสุรวท) is an immense, strangely shaped peak which arises in the center of the world, and around which the Sun and Moon revolve. Its base rests in a vast ocean, and it is surrounded by several rings of lesser mountain ranges and oceans. The three worlds listed below are all located on, or around, Sumeru: the *Trāyastriṃśa* devas live on its peak, the *Cāturmahārājikakāyika* devas live on its slopes, and the Asuras live in the ocean at its base. Sumeru and its surrounding oceans and mountains are the home not just of these deities, but also vast assemblies of beings of popular mythology who only rarely intrude on the human world. They are even more passionate than the higher devas, and do not simply enjoy themselves but also engage in strife and fighting.

- ***Trāyastriṃśa*** त्रायस्त्रिंश or ***Tāvatiṃsa*** तवतिस (Tib: *sum cu rtsa gsum pa*; Chn/Jpn: 忉利天/三十三天 *Tōri-ten*; တာဝတိံသာ; Thai: ดาวดึงส์, ไตรตึงศ, ดาวดึงสา or ตวยายสุตฺตสิศ) – The world "of the Thirty-three (devas)" is a wide flat space on the top of Mount Sumeru, filled with the gardens and palaces of the devas. Its ruler is Śakra devānām indra, शक्रो देवानामिन्द्र: "Śakra, lord of the devas". Besides the eponymous Thirty-three devas, many other devas and supernatural beings dwell here, including the attendants of the devas and many heavenly courtesans (*apsaras* or nymphs). Sakka and the devas honor sages and holy men. Many devas dwelling here live in mansions in the air. The beings of this world are 1,500 feet (460 m) tall and live for 36,000,000 years (Sarvāstivāda tradition) or 3/4 of a yojana tall and live for 30,000,000 years (Vibhajyavāda tradition). The height of this world is 80 yojanas above the Earth.
- ***Cāturmahārājikakāyika*** चातुर्महाराजिक or ***Cātummahārājika*** चातुम्महाराजिक (Tib: *rgyal chen bzhi*; Chn: 四天王天; Jpn: 四大王衆天 *Shidaiōshu-ten*; စတုမဟာရာဇ်; Thai: จาตุรมหาราชิกา or จาตุรมหาราชิกกา) – The world "of the Four Great Kings" is found on the lower slopes of Mount Sumeru, though some of its inhabitants live in the air around the mountain. Its rulers are the four Great Kings of the name, *Virūdhaka* विरूढकः, king of the Southern Direction, is lord of the kumbandas; *Dhṛtarāṣṭra* धृतराष्ट्रः, king of the Eastern Direction, is lord of the gandhabbas; *Virūpākṣa* विरूपाक्षः, king of the Western Direction, is lord of the nagas; and their leader *Vaiśravaṇa* वैश्रवणः, also known as Kuvera, who rules as king of the Northern Direction, is lord of the yakkhas, but ultimately all are accountable to Sakra. They are the martial kings who guard the four quarters of the Earth. The Garudas and the devas who guide the Sun and Moon are also considered part of this world, as are the retinues of the four kings, composed of *Kumbhāṇḍas* कुम्भाण्ड (dwarfs), *Gandharvas* गन्धर्व (fairies), *Nāgas* नाग (dragons) and *Yakṣas* यक्ष (goblins). These devas also inhabit remote areas such as forests, hills, and abandoned caves. Though living in misery they have the potential for awakening and can attain the path and fruits of the spiritual life. The beings of this world are 750 feet (230 m) tall and live for 9,000,000 years (Sarvāstivāda tradition) or 90,000 years (Vibhajyavāda tradition). The height of this world is from sea level up to 40 yojanas above the Earth.
- ***Asura*** असुर (Tib: *lha ma yin*; Chn/Jpn: 阿修羅 *Ashura*; Burmese: အသုရာ; Thai: อสุรกาย) – The world of the Asuras is the space at the foot of Mount Sumeru, much of which is a deep ocean. It is not the Asuras' original home, but the place they found themselves after they were hurled, drunken, from *Trāyastriṃśa* where they had formerly lived. The Asuras are always fighting to regain their lost kingdom on the top of Mount Sumeru, but are unable to break the guard of the Four Great Kings. The Asuras are divided into many groups, and have no single ruler, but among their leaders are *Vemacitrin* वेमचित्री (Pāli: *Vepacitti* वेपचित्ती) and Rāhu. In later texts, we find the Asura realm as one of the four unhappy states of rebirth, but the Nikāya evidence however does not show that the Asura realm was regarded as a state of suffering.

## Earthly realms

- **Manuṣya-loka** मनुष्यलोक (Tib: *mi*; Chn/Jpn: 人 *nin*; Burmese: မနုဿဘုံ; Thai: มนุสาโลก or มนุษยโลก) – This is the world of humans and human-like beings who live on the surface of the earth. Birth in this plane results from giving and moral discipline of middling quality. This is the realm of moral choice where destiny can be guided. The Khana Sutta mentioned that this plane is a unique balance of pleasure and pain. It facilitates the development of virtue and wisdom to liberate oneself from the entire cycle of rebirths. For this reason rebirth as a human being is considered precious according to the Chiggala Sutta. The mountain-rings that engird Sumeru are surrounded by a vast ocean, which fills most of the world. The ocean is in turn surrounded by a circular mountain wall called *Cakravāḍa* चक्रवाड (Pāli: *Cakkavāḍa* चक्कवाळ; Thai: จักรวาล or จกฺกวฬ) which marks the horizontal limit of the world. In this ocean there are four continents which are, relatively speaking, small islands in it. Because of the immenseness of the ocean, they cannot be reached from each other by ordinary sailing vessels, although in the past, when the cakravartin kings ruled, communication between the continents was possible by means of the treasure called the **cakraratna** (Pāli **cakkaratana**), which a cakravartin king and his retinue could use to fly through the air between the continents. The four continents are:
  - **Jambudvīpa** जम्बुद्वीप or **Jambudīpa** जम्बुदीप (Chn/Jpn: 閻浮提 *Enbudai*; Burmese: ဇမ္ဗူဒီပ; Thai: จมฺพทวีป) is located in the south and is the dwelling of ordinary human beings. It is said to be shaped "like a cart", or rather a blunt-nosed triangle with the point facing south. (This description probably echoes the shape of the coastline of southern India.) It is 10,000 yojanas in extent (Vibhajyavāda tradition) or has a perimeter of 6,000 yojanas (Sarvāstivāda tradition) to which can be added the southern coast of only 3.5 yojanas' length. The continent takes its name from a giant Jambu tree (*Syzygium cumini*), 100 yojanas tall, which grows in the middle of the continent. Every continent has one of these giant trees. All Buddhas appear in Jambudvīpa. The people here are five to six feet tall and their length of life varies between 10 and about 10<sup>140</sup> years (Asankya Aayu).
  - **Pūrvavideha** पूर्वविदेह or **Pubbavideha** पुब्वविदेह (Burmese: ပုပ္ဖဝိဒေဗ; Thai: ปุพฺพวิเทห) or ပုဆွဝိကေတီပ is located in the east, and is shaped like a semicircle with the flat side pointing westward (i.e., towards Sumeru). It is 7,000 yojanas in extent (Vibhajyavāda tradition) or has a perimeter of 6,350 yojanas of which the flat side is 2,000 yojanas long (Sarvāstivāda tradition). Its tree is the *acacia*, or *Albizia lebbek* (Sukhōthai tradition). The people here are about 12 feet (3.7 m) tall and they live for 700 years. Their main work is trading and buying materials.
  - **Aparagodānīya** अपरगोदानीय or **Aparagoyāna** अपरगोयान (Burmese: အပရဂေါဏာန; Thai: อปสโกยานทวีป or อปสโกทานียทวีป) is located in the west, and is shaped like a circle with a circumference of about 7,500 yojanas (Sarvāstivāda tradition). The tree of this continent is a giant Kadamba tree (*Anthocephalus chinensis*). The human inhabitants of this continent do not live in houses but sleep on the ground. Their main transportation is Bullock cart. They are about 24 feet (7.3 m) tall and they live for 500 years.
  - **Uttarakuru** उत्तरकुरु (Burmese: ဣတ္ထရကုရု; Thai: อุตฺตรกุรุทวีป) is located in the north, and is shaped like a square. It has a perimeter of 8,000 yojanas, being 2,000 yojanas on each side. This continent's tree is called a *kalpavṛkṣa* कल्पवृक्ष (Pāli: kapparukkha कप्परुक्ख) or kalpa-tree, because it lasts for the entire kalpa. The inhabitants of Uttarakuru have cities built in the air. They are said to be extraordinarily wealthy, not needing to labor for a

living – as their food grows by itself – and having no private property. They are about 48 feet (15 m) tall and live for 1,000 years, and they are under the protection of *Vaiśravaṇa*.

- **Tiryagyonī-loka** तिर्यग्योनिलोक or **Tiracchāna-yoni** तिरच्छानयोनि (Tib: *dud 'gro*; Chn/Jpn: 畜生 *chikushō*; Burmese: တိရစ္ဆာန်ဘုံ; Thai: เดรัจฉานภุมิ or ตिरยคุโยนิโลก) – This world comprises all members of the animal kingdom that are capable of feeling suffering, regardless of size. The animal realm includes animals, insects, fish, birds, worms, etc..
- **Pretaloka** प्रेतलोक or **Petaloka** पेटलोक (Tib: *yi dwags*; Burmese: ပြိတ္တာ; Thai: เปตภุมิ or เปตุตโลก) – The pretas, or "hungry ghosts", are mostly dwellers on earth, though due to their mental state they perceive it very differently from humans. They live for the most part in deserts and wastelands. This is the realm where ghost and unhappy spirits wander in vain, hopelessly in search of sensual fulfillment.

## Hells (Narakas)

**Naraka** नरक or **Niraya** निरय (Tib: *dmyal ba*; Burmese: ငရဲ; Thai: นรก) is the name given to one of the worlds of greatest suffering, usually translated into English as "hell" or "purgatory". These are realms of extreme sufferings. As with the other realms, a being is born into one of these worlds as a result of his *karma*, and resides there for a finite length of time until his karma has achieved its full result, after which he will be reborn in one of the higher worlds as the result of an earlier karma that had not yet ripened. The mentality of a being in the hells corresponds to states of extreme fear and helpless anguish in humans.

Physically, Naraka is thought of as a series of layers extending below Jambudvīpa into the earth. There are several schemes for counting these Narakas and enumerating their torments. One of the more common is that of the Eight Cold Narakas and Eight Hot Narakas.

## Cold Narakas

- **Arbuda** अर्बुद – the "blister" Naraka
- **Nirarbuda** निरर्बुद – the "burst blister" Naraka
- **Ataṭa** अतट – the Naraka of shivering
- **Hahava** हहव – the Naraka of lamentation
- **Huhuva** हुहुव – the Naraka of chattering teeth
- **Utpala** उत्पल – the Naraka of skin becoming blue as a blue lotus
- **Padma** पद्म – the Naraka of cracking skin
- **Mahāpadma** महापद्म – the Naraka of total frozen bodies falling apart

Each lifetime in these Narakas is twenty times the length of the one before it.

## Hot Narakas

- **Sañjīva** सञ्जीव (Burmese: သိင်္ခါး ငရဲ ; Thai: สัตยชีวนนรก) – the "reviving" Naraka. Life in this Naraka is  $162 \times 10^{10}$  years long.
- **Kālasūtra** कालसूत्र (Burmese: ကာလသုတ် ငရဲ; Thai: ทัพสุตตมหารก/กาลสูตร) – the "black thread" Naraka. Life in this Naraka is  $1296 \times 10^{10}$  years long.

- **Samghāta** **संघात** (Burmese: သဃိတ ငရဲ; Thai: สังขามหาสนก or สัมภาท) – the "crushing" Naraka. Life in this Naraka is  $10,368 \times 10^{10}$  years long.
- **Raurava/Rirava** **रौरव/रीरव** (Burmese: ရောဂူဝ ငရဲ; Thai: โธรรวมหาสนก) – the "screaming" Naraka. Life in this Naraka is  $82,944 \times 10^{10}$  years long.
- **Mahāraurava/Mahārīrava** **มหารौरव/महारीरव** (Burmese: မဟာရောဂူဝ ငရဲ; Thai: มหาโธรรวมหาสนก) – the "great screaming" Naraka. Life in this Naraka is  $663,552 \times 10^{10}$  years long.
- **Tāpana/Tapana** **तापन/तपन** (Burmese: တာပန ငရဲ; Thai: ตาปนมหาสนก) – the "heating" Naraka. Life in this Naraka is  $5,308,416 \times 10^{10}$  years long.
- **Mahātāpana** **महातापन** (Burmese: မဟာတာပန ငရဲ; Thai: มหาตาปนมหาสนก) – the "great heating" Naraka. Life in this Naraka is  $42,467,328 \times 10^{10}$  years long.
- **Avīci** **अवीचि** (Burmese: အဝီစိ ငရဲ; Thai: อเวจีมหาสนก/อวิจิ) – the "uninterrupted" Naraka. Life in this Naraka is  $339,738,624 \times 10^{10}$  years long.

Each lifetime in these Narakas is eight times the length of the one before it.

## The foundations of the earth

All of the structures of the earth, Sumeru and the rest, extend downward to a depth of 80,000 *yojanas* below sea level – the same as the height of Sumeru above sea level. Below this is a layer of "golden earth", a substance compact and firm enough to support the weight of Sumeru. It is 320,000 *yojanas* in depth and so extends to 400,000 *yojanas* below sea level. The layer of golden earth in turn rests upon a layer of water, which is 8,000,000 *yojanas* in depth, going down to 8,400,000 *yojanas* below sea level. Below the layer of water is a "circle of wind", which is 16,000,000 *yojanas* in depth and also much broader in extent, supporting 1,000 different worlds upon it. *Yojanas* are equivalent to about 13 km (8 mi).

## Sahasra cosmology

Sahasra means "one thousand". All of the planes, from the plane of neither perception nor non-perception (*nevasanna-asanna-ayatana*) down to the *Avīci* – the "without interval" *niraya* – constitutes the single world-system, *cakkavāḷa* (intimating something circular, a "wheel", but the etymology is uncertain<sup>[13]</sup>), described above. In modern parlance it would be called a 'universe', or 'solar system'.

A collection of one thousand solar systems are called a "thousandfold minor world-system" (*culanika lokadhatu*). Or small chiliocosm.

A collection of 1,000 times 1,000 world-systems (one thousand squared) is a "thousandfold to the second power middling world-system" (*dvisahassi majjhima lokadhatu*). Or medium dichiliocosm.

The largest grouping, which consists of one thousand cubed world-systems, is called the "tisahassi mahasassi lokadhatu". Or great trichiliocosm.

The Tathagata, if he so wished, could effect his voice throughout a great trichiliocosm. He does so by suffusing the trichiliocosm with his radiance, at which point the inhabitants of those world-system will perceive this light, and then proceeds to extend his voice throughout that realm.<sup>[14]</sup>

# Temporal cosmology

---

Buddhist temporal cosmology describes how the universe comes into being and is dissolved. Like other Indian cosmologies, it assumes an infinite span of time and is cyclical. This does not mean that the same events occur in identical form with each cycle, but merely that, as with the cycles of day and night or summer and winter, certain natural events occur over and over to give some structure to time.

The basic unit of time measurement is the **mahākalpa** or "Great Eon" (Chn/Jpn: 大劫 *daigō*; Thai: มหาภิ  
ป or มหาภิ  
ป; Devanagari: महाकल्प / महाकप्प). The length of this time in human years is never defined exactly, but it is meant to be very long, to be measured in billions of years if not longer.

## Maha Kalpa

The word kalpa, means 'moment'. A maha kalpa consists of four moments (kalpa), the first of which is creation. The creation moment consists of the creation of the "receptacle", and the descent of beings from higher realms into more coarse forms of existence. During the rest of the creation moment, the world is populated. Human beings who exist at this point have no limit on their lifespan. The second moment is the duration moment, the start of this moment is signified by the first sentient being to enter hell (niraya), the hells and nirayas not existing or being empty prior to this moment. The duration moment consists of twenty "intermediate" moments (antarakappas), which unfold in a drama of the human lifespan descending from 80,000 years to 10, and then back up to 80,000 again. The interval between 2 of these "intermediate" moments is the "seven day purge", in which a variety of humans will kill each other (not knowing or recognizing each other), some humans will go into hiding. At the end of this purge, they will emerge from hiding and repopulate the world. After this purge, the lifespan will increase to 80,000, reach its peak and descend, at which point the purge will happen again.

Within the duration 'moment', this purge and repeat cycle seems to happen around 18 times, the first "intermediate" moment consisting only of the descent from 80,000 – the second intermediate moment consisting of a rise and descent, and the last consisting only of an ascent.

After the duration 'moment' is the dissolution moment, the hells will gradually be emptied, as well as all coarser forms of existence. The beings will flock to the form realms (rupa dhatu), a destruction of fire occurs, sparing everything from the realms of the 'radiant' gods and above (abha deva).

After 7 of these destructions by 'fire', a destruction by water occurs, and everything from the realms of the 'pleasant' gods and above is spared (subha deva).

After 64 of these destructions by fire and water, that is – 56 destructions by fire, and 7 by water – a destruction by wind occurs, this eliminates everything below the realms of the 'fruitful' devas (vehapphala devas, literally of "great fruit"). The pure abodes (suddhavasa, meaning something like pure, unmixed, similar to the connotation of "pure bred German shepherd"), are never destroyed. Although without the appearance of a Buddha, these realms may remain empty for a long time. The inhabitants of these realms have exceedingly long life spans.

The formless realms are never destroyed because they do not consist of form (rupa). The reason the world is destroyed by fire, water and wind, and not earth is because earth is the 'receptacle'.

After the dissolution moment, this particular world system remains dissolved for a long time, this is called the 'empty' moment, but the more accurate term would be "the state of being dissolved". The beings that inhabited this realm formerly will migrate to other world systems, and perhaps return if their journeys lead here again.<sup>[15][16]</sup>

A **mahākalpa** is divided into four kalpas or "eons" (Chn/Jpn: 劫 *kō*; Thai: วัฏ; अन्तरकल्प), each distinguished from the others by the stage of evolution of the universe during that kalpa. The four kalpas are:

- **Vivartakalpa** विवर्तकल्प "Eon of evolution" – during this kalpa the universe comes into existence.
- **Vivartasthāyikalpa** विवर्तस्थायिकल्प "Eon of evolution-duration" – during this kalpa the universe remains in existence in a steady state.
- **Samvartakalpa** संवर्तकल्प "Eon of dissolution" – during this kalpa the universe dissolves.
- **Samvartasthāyikalpa** संवर्तस्थायिकल्प "Eon of dissolution-duration" – during this kalpa the universe remains in a state of emptiness.

Each one of these kalpas is divided into twenty **antarakalpas** अन्तरकल्प (Pāli: **antarakappa** अन्तरकप्प; Chn/Jpn: 中劫, "inside eons"; Thai: วัฏสงครุ) each of about the same length. For the *Samvartasthāyikalpa* this division is merely nominal, as nothing changes from one antarakalpa to the next; but for the other three kalpas it marks an interior cycle within the kalpa.

## Vivartakalpa

The Vivartakalpa begins with the arising of the primordial wind, which begins the process of building up the structures of the universe that had been destroyed at the end of the last mahākalpa. As the extent of the destruction can vary, the nature of this evolution can vary as well, but it always takes the form of beings from a higher world being born into a lower world. The example of a Mahābrahmā being the rebirth of a deceased Ābhāsvara deva is just one instance of this, which continues throughout the Vivartakalpa until all the worlds are filled from the Brahmaloka down to Naraka. During the Vivartakalpa the first humans appear; they are not like present-day humans, but are beings shining in their own light, capable of moving through the air without mechanical aid, living for a very long time, and not requiring sustenance; they are more like a type of lower deity than present-day humans are.<sup>[17]</sup>

Over time, they acquire a taste for physical nutriment, and as they consume it, their bodies become heavier and more like human bodies; they lose their ability to shine, and begin to acquire differences in their appearance, and their length of life decreases. They differentiate into two sexes and begin to become sexually active. Then greed, theft and violence arise among them, and they establish social distinctions and government and elect a king to rule them, called Mahāsammata महासम्मत्, "the great appointed one". Some of them begin to hunt and eat the flesh of animals, which have by now come into existence.<sup>[18]</sup>

## Vivartasthāyikalpa

### First antarakalpa

The Vivartasthāyikalpa begins when the first being is born into Naraka, thus filling the entire universe with beings. During the first antarakalpa of this eon, the duration of human lives declines from a vast but unspecified number of years (but at least several tens of thousands of years) toward the modern lifespan of less than 100 years. At the beginning of the antarakalpa, people are still generally happy. They live under the rule of a universal monarch or "wheel-turning king" (Sanskrit: cakravartin चक्रवर्ति; Jpn: 轉輪聖王 *Tenrin Jō-ō*; Thai: พระเจ้าจักรวาล), who conquer. The Mahāsudassana-sutta (DN.17) tells of the life of a cakravartin king, Mahāsudassana (Sanskrit: Mahāsudarśana) who lived for 336,000 years. The Cakkavatti-sīhanāda-sutta (DN.26) tells of a later dynasty of cakravartins, *Daḥhanemi* (Sanskrit: *Dr̥ḍhanemi*) and five of his descendants, who had a lifespan of over 80,000 years. The seventh of this line of cakravartins broke



with the traditions of his forefathers, refusing to abdicate his position at a certain age, pass the throne on to his son, and enter the life of a *śramaṇa* श्रमण. As a result of his subsequent misrule, poverty increased; as a result of poverty, theft began; as a result of theft, capital punishment was instituted; and as a result of this contempt for life, murders and other crimes became rampant.

The human lifespan now quickly decreased from 80,000 to 100 years, apparently decreasing by about half with each generation (this is perhaps not to be taken literally), while with each generation other crimes and evils increased: lying, greed, hatred, sexual misconduct, disrespect for elders. During this period, according to the Mahāpadāna-sutta (DN.14) three of the four Buddhas of this antarakalpa lived: Kakusandha Buddha ककुच्छन्दः (Pāli: Kakusandha ककुन्ध), at the time when the lifespan was 40,000 years; Kanakamuni Buddha (Pāli: Konāgamana कोनागमन) when the lifespan was 30,000 years; and Kāśyapa काश्यपः Buddha (Pāli: Kassapa कस्सप) when the lifespan was 20,000 years.

Our present time is taken to be toward the end of the first antarakalpa of this Vivartasthāyikalpa, when the lifespan is less than 100 years, after the life of Śākyamuni शाक्यमुनिः Buddha (Pāli: Sakyamuni ), who lived to the age of 80.

The remainder of the antarakalpa is prophesied to be miserable: lifespans will continue to decrease, and all the evil tendencies of the past will reach their ultimate in destructiveness. People will live no longer than ten years, and will marry at five; foods will be poor and tasteless; no form of morality will be acknowledged. The most contemptuous and hateful people will become the rulers. Incest will be rampant. Hatred between people, even members of the same family, will grow until people think of each other as hunters do of their prey.<sup>[19]</sup>

Eventually a great war will ensue, in which the most hostile and aggressive will arm themselves with swords in their hands and go out to kill each other. The less aggressive will hide in forests and other secret places while the war rages. This war marks the end of the first antarakalpa.<sup>[20]</sup>

## Second antarakalpa

At the end of the war, the survivors will emerge from their hiding places and repent their evil habits. As they begin to do good, their lifespan increases, and the health and welfare of the human race will also increase with it. After a long time, the descendants of those with a 10-year lifespan will live for 80,000 years, and at that time there will be a cakravartin king named *Saṅkha* शंख. During his reign, the current bodhisattva in the *Tuṣita* heaven will descend and be reborn under the name of Ajita अजित. He will enter the life of a *śramaṇa* and will gain perfect enlightenment as a Buddha; and he will then be known by the name of Maitreya (मैत्रेयः, Pāli: Metteyya मेत्तेय्य).

After Maitreya's time, the world will again worsen, and the lifespan will gradually decrease from 80,000 years to 10 years again, each *antarakalpa* being separated from the next by devastating war, with peaks of high civilization and morality in the middle. After the 19th *antarakalpa*, the lifespan will increase to 80,000 and then not decrease, because the *Vivartasthāyikalpa* will have come to an end.

## Saṃvartakalpa

The *Saṃvartakalpa* begins when beings cease to be born in Naraka. This cessation of birth then proceeds in reverse order up the vertical cosmology, i.e., pretas then cease to be born, then animals, then humans, and so on up to the realms of the deities.

When these worlds as far as the Brahmāloka are devoid of inhabitants, a great fire consumes the entire physical structure of the world. It burns all the worlds below the Ābhāsvara worlds. When they are destroyed, the *Saṃvartasthāyikalpa* begins.

## ***Saṃvartasthāyikalpa***

There is nothing to say about the *Saṃvartasthāyikalpa*, since nothing happens in it below the Ābhāsvara worlds. It ends when the primordial wind begins to blow and build the structure of the worlds up again.

## **Other destructions**

The destruction by fire is the normal type of destruction that occurs at the end of the *Saṃvartakalpa*. But every eighth mahākalpa, after seven destructions by fire, there is a destruction by water. This is more devastating, as it eliminates not just the Brahma worlds but also the Ābhāsvara worlds.

Every sixty-fourth mahākalpa, after fifty six destructions by fire and seven destructions by water, there is a destruction by wind. This is the most devastating of all, as it also destroys the *Śubhakarṣṇa* worlds. The higher worlds are never destroyed.

## **See also**

---

- [Buddhism and evolution](#)
- [Fourteen unanswerable questions](#)
- [Hindu cosmology](#)
- [Index of Buddhism-related articles](#)
- [Jain cosmology](#)
- [Religious cosmology](#)
- [Secular Buddhism](#)

## **References**

---

1. "Aṅguttara Nikāya 007. Mahavagga – The greater section" (<http://metta.lk/tipitaka/2Sutta-Pitaka/4Anguttara-Nikaya/Anguttara4/7-sattakanipata/007-mahavaggo-e.html>). *Mettanet - Lanka*. Retrieved 7 May 2015. "Having developed loving kindness for seven years, he did not come to this world for seven forward and backward world cycles."
2. *Collected Wheel Publications Volume XIV: Numbers 198–215*. Buddhist Publication Society. 2011. "I did not return to this world for seven aeons of world-contraction and world-expansion."
3. Nyanatiloka. "kappa" ([http://www.palikanon.com/english/wtb/g\\_m/kappa.htm](http://www.palikanon.com/english/wtb/g_m/kappa.htm)). *Tipitaka (Drei-Korb), der Pali Kanon des Theravāda-Buddhismus*. Retrieved 7 May 2015.
4. Tan, Piya. "Aggañña Sutta" (<https://web.archive.org/web/20171031182136/http://dharmafarer.org/wordpress/wp-content/uploads/2009/12/2.19-Agganna-S-d27-piya.pdf#>) (PDF). *The Dharmafarers*. Archived from the original (<http://dharmafarer.org/wordpress/wp-content/uploads/2009/12/2.19-Agganna-S-d27-piya.pdf>) (PDF) on 2017-10-31. Retrieved 7 May 2015. "Then the female developed female organs,<sup>87</sup> and the male developed male organs."

5. "Aṅguttara Nikāya 3. Tika Nipāta 8. Anandavaggo" (<http://metta.lk/tipitaka/2Sutta-Pitaka/4Anguttara-Nikaya/Anguttara1/3-tikanipata/008-anandavaggo-e.html>). *Mettanet – Lanka*. Retrieved 27 May 2016. "Here Ānanda, the Thus Gone One pervades the three thousandfold and the great thousandfold world system with an effulgent light, so that those sentient beings see it, then the Thus Gone One makes a sound. In this manner an announcement is made to the three thousandfold and the great thousandfold world system if he desires."
6. Tan, Piya. "Saleyyaka Sutta" (<http://dharmafarer.org/wordpress/wp-content/uploads/2009/12/5.7-Saleyyaka-S-m41-piya.pdf>) (PDF). *The Dharmafarers*. Retrieved 7 May 2015. "I would arise in fellowship with the gods of boundless radiance (appaman'abha deva)!"
7. Gethin, Rupert (1998). *The Foundations of Buddhism* (<https://archive.org/details/foundationsofbud00rupe/page/>). Oxford: Oxford University Press. pp. Chapter 5 (<https://archive.org/detail/s/foundationsofbud00rupe/page/>). ISBN 0-19-289223-1.
8. "Buddhist cosmology – The Zen Universe" (<http://www.thezenuniverse.org/buddhist-cosmology/>). *The Zen Universe*. 2016-11-01. Retrieved 2018-10-24.
9. 佛教对于彼岸世界的想像及其对中土的影响 – 王青 (<http://www.china2551.org/Article/fjll/dc/200908/10047.html>)
10. Susan Elbaum Jootla "Teacher of the Devas": The Wheel Publication No. 414/416 (Kandy: Buddhist Publication Society, 1997) article link at Access to Insight (<http://www.accesstosight.org/lib/authors/jootla/wheel414.html>) Archived (<https://web.archive.org/web/20130204142247/http://www.accesstosight.org/lib/authors/jootla/wheel414.html>) February 4, 2013, at the [Wayback Machine](#)
11. Ruthless Compassion: Wrathful Deities in Early Indo–Tibetan Esoteric Buddhist Art by Robert N. Linrothe, Pg.180 [1] (<https://books.google.com/books?id=AdtYxZoG228C&pg=PA180#v=onepage&q&f=false>)
12. "Saturn | planet" (<http://www.britannica.com/EBchecked/topic/525169/Saturn>). *Encyclopedia Britannica*. Retrieved 2017-06-08.
13. Jayatilleke, K.N. "Facets of Buddhist Thought" (<http://www.bps.lk/olib/wh/wh162-p.html>). *Buddhist Publication Society*. Buddhist Publication Society. Retrieved 7 May 2015. "The early Buddhist texts too do not state that the Major World-System is all there is, in the universe, for the question as to whether the world is finite or infinite (ananto) in extent is left unanswered (avyakata). The later commentarial tradition however goes a step further. One of the synonyms for a "world-system" or loka-dhātu is cakkavāḷa, a word of uncertain etymology meaning a "wheel", "circle" or "sphere.""
14. "Aṅguttara Nikāya 3. Tika Nipāta 8. Anandavaggo" (<http://metta.lk/tipitaka/2Sutta-Pitaka/4Anguttara-Nikaya/Anguttara1/3-tikanipata/008-anandavaggo-e.html>). *Mettanet – Lanka*. Retrieved 7 May 2015.
15. Kloetzli, Randy (1983). *Buddhist Cosmology: From Single World System to Pure Land : Science and Theology in the Images of Motion and Light*. Motilal Banarsidass. "The divisions of cosmic time outlined in the Kosa are predictably elaborate"
16. Thera, Ñānamoli; Bodhi, Bhikkhu. "Maha-sihanada Sutta: The Great Discourse on the Lion's Roar" (<http://www.accesstosight.org/tipitaka/mn/mn.012.ntbb.html>). *Access to Insight*. Retrieved 7 May 2015. "But it is impossible to find a realm in the round that I have not already [82] passed through in this long journey, except for the gods of the Pure Abodes;"
17. *Dīghanikāya*, Sutta 27 (*Aggañña Sutta*), sections 10–11.
18. *Dīghanikāya*, Sutta 27 (*Aggañña Sutta*), sections 12–26.
19. *Dīghanikāya*, Sutta 26 (*Cakkavattisīhanādasutta*), sections 19–20.
20. *Dīghanikāya*, Sutta 26 (*Cakkavattisīhanādasutta*), sections 21.

## Further reading

---

- Robert E. Buswell Jr.; Donald S. Lopez Jr. (2013). *The Princeton Dictionary of Buddhism* (<https://books.google.com/books?id=DXN2AAAAQBAJ&pg=frontcover>). Princeton, New Jersey: Princeton University Press. ISBN 978-1400848058. Retrieved 22 June 2015.
  - Buswell, Robert E., ed. (2004). *Encyclopedia of Buddhism (Cosmology)*. Macmillan Reference US. pp. 183–187. ISBN 0-02-865718-7.
  - Trainor, Kevin (2004). *Buddhism: The Illustrated Guide* ([https://books.google.com/books?id=\\_PrloTKuAjwtC&pg=frontcover](https://books.google.com/books?id=_PrloTKuAjwtC&pg=frontcover)). Oxford: Oxford University Press. ISBN 978-0195173987. Retrieved 22 June 2015.
  - *Buddhist Cosmology* (<http://book.dou.us/download.php?file=gl101e.pdf>) (PDF). Dhammakaya Open University.
- 

Retrieved from "[https://en.wikipedia.org/w/index.php?title=Buddhist\\_cosmology&oldid=1080360003](https://en.wikipedia.org/w/index.php?title=Buddhist_cosmology&oldid=1080360003)"

---

This page was last edited on 31 March 2022, at 20:11 (UTC).

Text is available under the Creative Commons Attribution-ShareAlike License 3.0; additional terms may apply. By using this site, you agree to the Terms of Use and Privacy Policy. Wikipedia® is a registered trademark of the Wikimedia Foundation, Inc., a non-profit organization.